			nation wenter	or Visit	
Requester's Full Name:	101Vo SADILO		Cond	1	1
Requester's Full Name:	THE JUICIO	Exami	ner#::16940	14 Days: 5/2	7703
Art Unit: 1659 P Mail Box and Bldg/Room Lo	hone Number 30 8	-4238 S	erial-Number: _	#10/088,	<u>525</u>
. Mail Box and Bldg/Room Lo	ocation:	Results For	nat Přefeřřěd-(ci	rcle): PAPER DIS	K E-MAIL
If more than one search is	IDAO	Ja 	in de Caracana		
If more than one search is	**************	*prioritize searc		***************	
Please provide a detailed statement	t of the search topic, and	d describe as specifi	cally as possible th	subject matter to be	searched
Include the elected species or struc	tures, keywords, synon	vms, acronyms, and	registry numbers	and combine with the	concept or
utility of the invention. Define any known. Please attach a copy of the	y terms that may have a	special meaning. G	ive examples or re	levant citations, author	s, etc, if
· ·		lainis, and abstract.	7/	0	****
Title of Invention:	edies for	intracta	ble w	ound	
Inventors (please provide full na	masi darii	70/0	Vun.	Kicks	lain
	ines)	PIFE		RYUFU (	1011010ava
		a da			
Earliest Priority Filing Date:	18/2/19	99		. — .	
*For Sequence Searches Only* Pleas	se include all pertinent in	formation (parent, chi	ild, divisional, or issi	ied patent numbers) alo	ng withithe
appropriate serial number.					
$\boldsymbol{\omega}$	1	1 11			
1/10/20	Spanel	X/10	Can	0	
	Jan	1 INE	Comp	10 mil	
	Act.	<i>f</i> .	/		
	110-0	61.4	1		
	Search In-C	aim	( •	•	
	<b>)</b>			*(**	
	•				
				· ·	
				•	
			· · · · ·	•	
日 8 3	3				
三 8 章	*	1,11		Inn Databat	
ECEI IAY 28 STICHE	****		F	Jan Delaval Reference Librarian	
2 3	,	12° x	Biotech	nology & Chemical Libr 1 1E07 - 703-308-4498	агу
•			•	n.delaval@uspto.gov	4.4
	3		- (-		
1.00		w ,	Market I	*	
* **	· Section		1		
				44	
************************************		0.5			And the second
STAFFIUSEONDY	Trype of Seans	1	Venilois and cos	Mickey milionie	· · · · · · · · · · · · · · · · · · ·
Searcher:	NA Sequence (#)	A STATE OF THE PARTY OF THE PAR	i Dioresta de la constante de	Where applicable	
Searcher Phone #: 449			7	The state of the s	
q.	SATA Sequence (#)	Dialogi	56.2		
Searcher-Location:	Structure (#)	Questel/o	ibit eggs	i de la companya della companya della companya de la companya della companya dell	
Date Searcher Picked Up: 5 29	Bibliographic _	Drillink.	State Comment	Laterania	and the same

S28 (53) shingation Date Completed: \_ Searcher Prep & Review Time: Patent Family Clerical Prep Time:

Online Time: \_\_\_

PTO-1590 (8-01)



# STIC Search Report Biotech-Chem Library

### STIC Database Tracking Number: 95128

TO: Michael Meller Location: 10A03

Thursday, May 29, 2003

Au: 1654

Serial Number: 10 / 088525

From: Jan Delaval

**Location: Biotech-Chem Library** 

CM1-1E07

Phone: 308-4498

jan.delaval@uspto.gov

## Search Notes

Jan Delaval Reference Librarian Biotechnology & Chemical Library CM1 1E07 – 703-308-4498 jan delaval@uspto.gov





# STIC SEARCH RESULTS

# Biotech-Chem Library

Questions about the scope or the results of the search? Contact the searcher or contact:

Mary Hale, Information Branch Supervisor 308-4258, CM1-1E01

Voluntary Results Feedback Form								
> I am an examiner in Workgroup: Example: 1610								
Relevant prior art found, search results used as follows:								
☐ 102 rejection								
☐ 103 rejection								
☐ Cited as being of interest.								
Helped examiner better understand the invention.								
Helped examiner better understand the state of the art in their technology.								
Types of relevant prior art found:								
☐ Foreign Patent(s)								
<ul> <li>Non-Patent Literature         <ul> <li>(journal articles, conference proceedings, new product announcements etc.)</li> </ul> </li> </ul>								
Relevant prior art not found:								
Results verified the lack of relevant prior art (helped determine patentability).								
Results were not useful in determining patentability or understanding the invention.								
Comments:								

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk



=> fil reg FILE 'REGISTRY' ENTERED AT 06:38:34 ON 29 MAY 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Jan Delaval
Reference Librarian
Biotechnology & Chemical Librar
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 MAY 2003 HIGHEST RN 521913-14-4 DICTIONARY FILE UPDATES: 28 MAY 2003 HIGHEST RN 521913-14-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot 17

- L7 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS
- RN 144125-41-7 REGISTRY
- CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, (S)- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C26 H33 F3 N4 O7
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 117:212979

- L7 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS
- RN 144125-40-6 REGISTRY
- CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH

MF C26 H33 F3 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 117:212979

L7 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 144055-55-0 REGISTRY

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI)
(CA INDEX NAME)

OTHER NAMES:

CN FK 706

FS STEREOSEARCH

MF C26 H33 F3 N4 O7 . Na

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, DRUGNL, DRUGUPDATES, IPA, PHAR, TOXCENTER, USPATFULL

CRN (144055-51-6)

Absolute stereochemistry.

■ N =

7 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

7 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:200832

REFERENCE 2: 137:103921

REFERENCE 3: 134:290425

REFERENCE 4: 132:245795

REFERENCE 5: 131:165341

REFERENCE 6: 127:341747

REFERENCE 7: 117:212979

L7 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 144055-51-6 REGISTRY

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C26 H33 F3 N4 O7

CI COM

SR CA

LC STN Files: CA, CAPLUS, DRUGUPDATES, USPATFULL

#### Absolute stereochemistry.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1957 TO DATE)

2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:90460

REFERENCE 2: 117:212979

#### => d his 17-

(FILE 'REGISTRY' ENTERED AT 06:27:33 ON 29 MAY 2003)

L7 4 S L2, L3, L5, L6

FILE 'HCAOLD' ENTERED AT 06:30:06 ON 29 MAY 2003

L8 0 S L7

FILE 'HCAPLUS' ENTERED AT 06:30:06 ON 29 MAY 2003

L9 8 S L7

L10 . 8 S FK706 OR FK 706

L11 12 S L9,L10

L12 1 S L11 AND (TAKAKURA ? OR MINOURA ?)/AU

L13 1 S L1 AND FUJISAWA?/PA,CS

L14 7 S L11 AND (PD<=20001002 OR PRD<=20001002 OR AD<=20001002)

L15 6 S L11 AND (PD<=19991002 OR PRD<=19991002 OR AD<=19991002)

L16 7 S L1, L12-L15

FILE 'USPATFULL, USPAT2' ENTERED AT 06:38:13 ON 29 MAY 2003 L17 3 S L11

FILE 'REGISTRY' ENTERED AT 06:38:34 ON 29 MAY 2003

=> fil uspatall FILE 'USPATFULL' ENTERED AT 06:38:45 ON 29 MAY 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 06:38:45 ON 29 MAY 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l17 bib abs kwic hitstr tot

```
L17
    ANSWER 1 OF 3 USPATFULL
AN
       2002:251837 USPATFULL
ΤI
       Use of an LTB4 antagonist for the treatment or prevention of diseases
       caused by increased expression of mucin genes
IN
       Anderskewitz, Ralf, Laupheim, GERMANY, FEDERAL REPUBLIC OF
       Meade, Christopher J. Montaque, Bingen, GERMANY, FEDERAL REPUBLIC OF
       Birke, Fran\lambda_{\chi} Ingelheim, GERMANY, FEDERAL REPUBLIC OF
       Jennewein, Hans Michael, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
       Jung, Birgit, Schwabenheim, GERMANY, FEDERAL REPUBLIC OF
                                200209/26
PI
       US 2002137792
                           Α1
                                20020/116 (10)
ΑI
       US 2002-50409
                            20010116
PRAI
       GB 2001-1128
       US 2001-266833P
                            2001020/6 (60)
DT
       Utility
FS
       APPLICATION
       BOEHRINGER INGELHEIM COMPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368,
LREP
       RIDGEFIELD, CT, 06877
       Number of Claims: 24
CLMN
ECL
       Exemplary Claim:/1
DRWN
       No Drawings
LN.CNT 566
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT ...

AB Medicaments and pharmaceutical kits comprising an LTB.sub.4 antagonist of formula (I) ##STR1##

a tautomer thereof or a pharmaceutically acceptable salt thereof, and methods of treating or preventing cystic fibrosis, diseases caused by increased expression of mucin genes in the bronchial or gastrointestinal epithelium, or hyperplasia of goblet cells induced by toxins of products of pathogenic bacteria in a patient in need of such treatment, the method comprising administering to the patient a therapeutically effective amount of an LTB.sub.4 antagonist of formula (I).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . Such drugs include but are not confined to drugs which inhibit the production or action of neutrophil elastase such as FK706, CE 1037, EPI-HNE-4, and alpha 1-antitrypsin.

CLM What is claimed is:

. to one of claims 1 to 6, wherein an additional active ingredient selected from the group consisting of atreleuton, zileuton, FK -706, CE 1037, EPI-HNE-4, alpha 1-antitrypsin, ambroxol, gentamycin, amikacin, kanamycin, streptomycin, neomycin, netimicin, colistin, iseganan, and tobramycinare, administered simultaneously or sequentially. . .

TT 57-92-1, Streptomycin, biological studies 1066-17-7, Colistin 1403-66-3, Gentamycin 1404-04-2, Neomycin 8063-07-8, Kanamycin 9041-92-3, .alpha.1-Antitrypsin 18683-91-5, Ambroxol 32986-56-4, Tobramycin 37517-28-5, Amikacin 56391-56-1, Netilmicin 111406-87-2, Zileuton 144055-55-0, FK-706 150493-09-7, CE 1037

154355-76-7, Atreleuton 257277-05-7, Iseganan 346735-24-8 442911-16-2, DX 890

(LTB4 antagonist for treatment and/or prevention of diseases caused by increased expression of mucin genes)

**144055-55-0**, FK-706

(LTB4 antagonist for treatment and/or prevention of diseases caused by increased expression of mucin genes)

RN 144055-55-0 USPATFULL

L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N-CN[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

L17 ANSWER 2 OF 3 USPATFULL AN 2002:165223 USPATFULL

ΤI Method for treating respiratory disorders associated with pulmonary elastic fiber injury

Cantor, Jerome O., Brooklyn, NY, UNITED STATES

Kuo, Jing-wen, Wakefield, MA, UNITED STATES

Mihalko, Paul J., Fremont, CA, UNITED STATES

Sachs, Dan, Boston, MA, UNITED STATES

Turino, Gerard, New York, NY, UNITED STATES

PΤ US 2002086852 Α1 20020704

20010523 (9) ΑI US 2001-863849 A1

Continuation-in-part of Ser. No. US 1998-79209, filed on 14 May 1998, RLI

PENDING

PRAI US 2000-206612P 20000523 (60)

DT Utility

FS APPLICATION

LREP BRYAN CAVE LLP, 245 Park Avenue, New York, NY, 10167

CLMN Number of Claims: 33 ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 2415

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ The present invention relates generally to the field of respiratory therapeutics, and in particular to the treatment of disorders of the lung matrix caused by damage to the elastic fibers of the lung matrix. More specifically, methods and materials are disclosed for the delivery to the lungs of polysaccharides, derivatives thereof and/or drug conjugates, used in the treatment and/or prevention of pulmonary disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

elastase inhibitor: ABT-491 (Abbot)

HNE inhibitor:

Ono-5046 (Ono)

Alpha 1-Antitrypsin: Recombinant AT-1 (Novartis) Elastase inhibitor: Erdosteine (Edmond Pharma) Elastase inhibitor: FK-706 (Fujisawa) Al-AT agonist: Gene Active AT-1 (Gene Medicine) Elastase inhibitor: Midesteine (Medea) Proteinase inhibitor: CMP-777 (Dupont) HNE inhibitor: CE-1037 (Cortech/United. ANSWER 3 OF 3 USPATFULL 1.17 AN 94:24423 USPATFULL Trifluoromethylketone derivatives, processes for preparation thereof and TΤ use thereof TN Hemmi, Keiji, Tsukuba, Japan Shima, Ichiro, Ibaraki, Japan Imai, Keisuke, Tsukuba, Japan Tanaka, Hirokazu, Tsuchiura, Japan Fujisawa Pharmaceutical Co., Ltd., Osaka, Japan (non-U.S. corporation) US 5296591 19940322 us 1991-80**5**610 19911212 (7) PRAI GB 1990-28231 19901231 GB 1991-19713 19910916 DTUtility FS Granted Primary Examiner: Moezie, F. T. EXNAM Oblon, Spivak, McClelland, Maier & Neustadt LREP CLMN Number of Claims: 6 E.C.L. Exemplary Claim: 1 No Drawings DRWN LN.CNT 1006 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The trifluoromethylketone derivatives (I) and pharmaceutically acceptable salts thereof have a human leukocyte elastase inhibiting activity and are useful as human leukocyte elastase inhibitors for treating or preventing degenerative diseases. The trifluoromethylketone derivatives (I) have the following formula: ##STR1## wherein R.sup.1 is C.sub.1-6 alkyl which has one or two substituents selected from carboxy, esterified carboxy and di-C.sub.1-6 alkylcarbamoyl; phenyl(C.sub.1-6) alkyl, the phenyl moiety of which may have halogen or nitro or amino substituents and the alkyl moiety of which may have carboxy or esterified carboxy substituents; halo-phenyl; morpholino; or morpholino(C.sub.1-6) alkyl, R.sup.2 and R.sup.3 are each C.sub.1-6 alkyl, X is -- or --NH--, and Y is ##STR2## and pharmaceutically acceptable salts thereof. CAS INDEXING IS AVAILABLE FOR THIS PATENT. 144055-45-8P 144055-46-9P 144055-42-5P 144055-43-6P 144055-44-7P 144055-47-0P 144055-48-1P 144055-50-5P **144055-51-6P** 144055-52-7P 144055-53-8P 144055-54-9P **144055-55-0P** 144055-58-3P 144055-60-7P 144055-56-1P 144055-57-2P 144055-59-4P 144055-62-9P 144055-63-0P 144079-17-4P 144079-18-5P 144055-61-8P 144079-19-6P 144125-37-1P 144125-38-2P 144125-39-3P 144125-40-6P 144125-41-7P (prepn. of, as human leukocyte elastase inhibitor) 144055-51-6P 144055-55-0P 144125-40-6P 144125-41-7P (prepn. of, as human leukocyte elastase inhibitor) RN 144055-51-6 USPATFULL L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N-CN [3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 144055-55-0 USPATFULL

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-l-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

HO<sub>2</sub>C 
$$\stackrel{H}{\stackrel{N}{\stackrel{}}}$$
  $\stackrel{O}{\stackrel{i-Pr}{\stackrel{}}}$   $\stackrel{O}{\stackrel{i-Pr}{\stackrel{}}}$   $\stackrel{O}{\stackrel{i-Pr}{\stackrel{}}}$   $\stackrel{CF_3}{\stackrel{}}$ 

Na

RN 144125-40-6 USPATFULL

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $H$ 
 $O$ 
 $i-Pr$ 
 $H$ 
 $O$ 
 $i-Pr$ 
 $H$ 
 $R$ 
 $CF_3$ 

RN 144125-41-7 USPATFULL

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 06:39:00 ON 29 MAY 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 29 May 2003 VOL 138 ISS 22 FILE LAST UPDATED: 28 May 2003 (20030528/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### => d all hitstr tot 116

```
ANSWER 1 OF 7 / HCAPLUS COPYRIGHT 2003 ACS
L16
      2001:283813
                       HCAPLUS
ΑN
      134:290425
DN
      Remedies for intractable wound
TI
      Takakura, Shoji; Minoura, Kyoko
      Fujisawa Pharmaceutical Co., Ltd., Japan PCT Int. Appl., 30 pp. CODEN: PIXXD2
TN
PA .
SO
DT
      Patent
LA
      Japane se
      ICM $61K045-0
IC
             A61P017-02
      ICS
      1-12 (Pharmacology)
      Section cross-reference(s): 63
FAN.CNT 1
      PATENT NO.
                             KIND DATE
                                                         APPLICATION NO.
                                                                                DATE
PI
      WO 2001026685
                              A1
                                     20010419
                                                         WO 2000-JP6873
                                                                                20001002 <--
            W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
                 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
```

TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,

```
RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1230933
                       Α1
                            20020814
                                           EP 2000-963072 20001002 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
                                           BR 2000-14831
     BR 2000014831
                       Α
                            20020827
                                                             20001002 <--
PRAI JP 1999-289247
                       Α
                            19991012
                                      <--
     WO 2000-JP6873
                       W
                            20001002
                                      <--
AΒ
     These remedies contain as the active ingredient a substance having a human
     leukocyte elastase inhibitory activity. The effects of
     3(RS)-[[4-(carboxymethylaminocarbonyl)-phenylcarbonyl]-L-valyl-L-
     prolyl]amino-1,1,1-trifluoro-4-methyl-2-oxopentane sodium salt (FR 136706)
     on the acetic acid-induced leg ulcer in normal and diabetic rats were
     examd.
ST
     wound healing leukocyte elastase inhibitor FR13670
ΙT
     Wound healing promoters
        (human leukocyte elastase inhibitors as remedies for intractable wound)
ΙT
     Drug delivery systems
        (topical; human leukocyte elastase inhibitors as remedies for
        intractable wound)
ΙT
     Skin, disease
        (ulcer; human leukocyte elastase inhibitors as remedies for intractable
        wound)
     144055-55-0
ΙT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (human leukocyte elastase inhibitors as remedies for intractable wound)
     9004-06-2, Elastase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (human leukocyte elastase inhibitors as remedies for intractable wound)
RE.CNT
              THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Cortech Inc; EP 182906 A1 HCAPLUS
(2) Cortech Inc; WO 8600077 A1 1986 HCAPLUS.
(3) Fujisawa Pharmaceutical Co Ltd; JP 04297446 A HCAPLUS
(4) Fujisawa Pharmaceutical Co Ltd; JP 06099378 B HCAPLUS
(5) Fujisawa Phármaceutical Co Ltd; CN 1040003 B HCAPLUS
(6) Fujisawa Pharmaceutical Co Ltd; CN 1063108 A HCAPLUS
(7) Fujisawa Pharmaceutical Co Ltd; AT 151775 E HCAPLUS
(8) Fujisawa Pharmaceutical Co Ltd; CA 2058560 AA HCAPLUS
(9) Fujisawa Pharmaceutical Co Ltd; RU 2073684 C1 HCAPLUS
(10) Fujisawa Pharmaceutical Co Ltd; ES 2099755 T3 HCAPLUS
(11) Fujisawa Pharmaceutical Co Ltd; HU 210263 B HCAPLUS
(12) Fujisawa Pharmaceutical Co Ltd; EP 494071 A3 HCAPLUS
(13) Fujisawa Pharmaceutical Co Ltd; EP 494071 B1 HCAPLUS
(14) Fujisawa Pharmaceutical Co Ltd; US 5296591 A HCAPLUS
(15) Fujisawa Pharmaceutical Co Ltd; HU 60507 A2 HCAPLUS
(16) Fujisawa Pharmaceutical Co Ltd; AU 641577 B2 HCAPLUS
(17) Fujisawa Pharmaceutical Co Ltd; FI 9105996 A HCAPLUS
(18) Fujisawa Pharmaceutical Co Ltd; ZA 9110200 A HCAPLUS
(19) Fujisawa Pharmaceutical Co Ltd; AU 9189853 A1 HCAPLUS
(20) Fujisawa Pharmaceutical Co Ltd; NO 9200035 A HCAPLUS
(21) Fujisawa Pharmaceutical Co Ltd; EP 494071 A2 1992 HCAPLUS
(22) Heinzel-Wieland, R; BIOMEDICA BIOCHIMICA ACTA 1991, V50(4-6), P677 HCAPLUS
     144055-55-0
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (human leukocyte elastase inhibitors as remedies for intractable wound)
```

RN

144055-55-0 HCAPLUS

L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N-CN [3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

L16 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS

1999:804055 HCAPLUS ΑN

DN 132:245795

ΓI

Smoking accelerates absorption of inhaled neutrophil elastase inhibitor

ΑU Koizumi, Fumiaki; Murakami, Manabu; Kageyama, Hiromitsu; Katashima, Masataka; Terakawa, Masato; Ohnishi, Akihiro

CS Department of Internal Medicine, Jikel University School of Medicine, Daisan Hospital, Tokyo, 201-8601, Japan

Clinical Pharmacology & Therapeutics (St. Louis) (1999), 66(5), SO CODEN: CLPTAT; ISSN: 0009-9236

PΒ Mosby, Inc.

DTJournal

LA English

CC

1-2 (Pharmacology) Section cross-reference(s): 4

AB The pharmacokinetics of the inhaled neutrophil elastase inhibitor FK706 were compared in healthy nonsmokers and smokers. The plasma concn.-time curves of inhaled FK706 were different between smokers and nonsmokers. The max. plasma concns. (Cmax) were higher in the smokers than in the nonsmokers. The time to reach Cmax (tmax) and the elimination half-life (t1/2) were smaller in the smokers than in the The area under the plasma concn.-time curve and plasma clearance were not significantly different between the 2 groups. Model-dependent pharmacokinetic anal., assuming a flip-flop model, revealed that the absorption rate const. (ka) was about 10-fold greater in smokers than in nonsmokers. Thus, significant increases of Cmax and ka and redns. of tmax and elimination t1/2 of the inhaled FK706 were obsd. in the healthy smokers, suggesting that the smoking habit accelerates absorption of the after inhalation. Attention should be given to the drug-related adverse events caused by smoking, esp. when the drug has a narrow therapeutic range.

ST FK 706 pharmacokinetics smoking; neutrophil elastase inhibitor FK 706 pharmacokinetics smoking

ΙT Tobacco smoke

> (smoking accelerates absorption of inhaled neutrophil elastase inhibitor **FK706** by humans)

IT9004-06-2, Neutrophil elastase

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; smoking accelerates absorption of inhaled neutrophil

elastase inhibitor FK706 by humans)

#### IT 144055-55-0, FK 706

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(smoking accelerates absorption of inhaled neutrophil elastase inhibitor FK706 by humans)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Crane, J; Lancet 1989, V1, P917 MEDLINE
- (2) Dawson, G; Pharmacol Ther 1982, V15, P207
- (3) Elwood, R; Am Rev Respir Dis 1983, V128, P523 MEDLINE
- (4) Gibaldi, M; Drugs and the pharmaceutical sciences 1975, V1, P35
- (5) Groutas, W; Med Res Rev 1987, V7, P227 HCAPLUS
- (6) Huchon, G; Am Rev Respir Dis 1984, V130, P457 MEDLINE
- (7) Hunt, S; Clin Pharmacol Ther 1976, V19, P546 HCAPLUS
- (8) Janoff, A; Am Rev Respir Dis 1985, V132, P417 MEDLINE
- (9) Jones, D; Chest 1985, V88, P631 MEDLINE
- (10) Jones, J; Lancet 1980, V1, P66 MEDLINE
- (11) Jones, J; Thorax 1983, V38, P129 MEDLINE
- (12) Kennedy, S; Am Rev Respir Dis 1984, V129, P143 MEDLINE
- (13) Llewellyn-Jones, C; Am J Respir Crit Care Med 1996, V153, P616 MEDLINE
- (14) MacNee, W; Am J Med 1991, V91(suppl 3C), P60S
- (15) Mason, G; Chest 1985, V88, P327 MEDLINE
- (16) McGuire, W; J Clin Invest 1982, V69, P543 HCAPLUS
- (17) Minty, B; Br J Ind Med 1985, V42, P631 MEDLINE
- (18) Minty, B; Br Med J (Clin Res Ed) 1981, V282, P1183 MEDLINE
- (19) Neale, M; Br J Clin Pharmacol 1986, V22, P373 HCAPLUS
- (20) Newhouse, M; Chest 1996, V110, P595 HCAPLUS
- (21) O'Byrne, P; J Appl Physiol 1984, V57, P77 MEDLINE
- (22) O'Connor, C; Am Rev Respir Dis 1993, V148, P1665 MEDLINE
- (23) O'Doherty, M; Nucl Med Commun 1985, V6, P209 MEDLINE
- (24) Pearce, N; Lancet 1995, V345, P41 MEDLINE
- (25) Rinderknecht, J; Am Rev Respir Dis 1980, V121, P105 MEDLINE
- (26) Schmekel, B; Thorax 1991, V46, P225 MEDLINE
- (27) Taylor, G; Adv Drug Deliv Rev 1990, V5, P37 HCAPLUS
- (28) Uchiba, M; Thromb Res 1995, V78, P117 HCAPLUS
- IT 144055-55-0, FK 706

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(smoking accelerates absorption of inhaled neutrophil elastase inhibitor FK706 by humans)

- RN 144055-55-0 HCAPLUS
- CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI)
  (CA INDEX NAME)

Absolute stereochemistry.

```
ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS
     1999:565936 HCAPLUS
AN
DN
     131:165341
     Preventives/remedies for skin aging
TТ
     Yabuta, Tsuguo; Yasumura, Mitsuru; Nakahara, Kunio; Furukawa, Yusuke;
IN
     Nomura, Kazuhiko; Murakami, Manabu
PΑ
     Fujisawa Pharmaceutical Co., Ltd., Japan
SO
     PCT Int. Appl., 38 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
IC
     ICM A61K045-00
         A61K038-03; C07K014-36; C07K005-093; C12P001-06
CC
     1-12 (Pharmacology)
     Section cross-reference(s): 62
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE-
                                            APPLICATION NO.
                                                             DATE
                             19990902
PΙ
     WO 9943352
                       A1
                                            WO 1999-JP761
                                                             19990219
             JP, US
         W:
                                                              IT,
         RW: AT, BE,
                                      ES, FI, FR, GB, GR,
                     CH, CY,
                                 DK,
                                                                      MC, NL,
             PT, SE
     EP 1057491
                             20001206
                                            EP 1999-905256
                                                             19990219 <--
                       Α1
         R: AT, BE,
                     CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                             19980224
PRAI JP 1998-41479
                                      <--
                       Α
     WO 1999-JP761
                             19990219
                                       <--
os
     MARPAT 131:165341
AR
     The invention relates to preventives/remedies for skin aging which contain
     as the active ingredient substances having an activity of inhibiting human
     leukocyte elastase [i.e. FR134043 and FK706].
     skin aging leukocyte elastase inhibitor; antiaging FR134043 leukocyte
ST
     elastase inhibitor; FK706 antiaging leukocyte elastase inhibitor
IT
     Skin, disease
        (aging; preventives/remedies for skin aging)
     9004-06-2, Elastase
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (human leukocyte, inhibitors for; preventives/remedies for skin aging)
     144055-55-0
                   177079-46-8, FR 134043
TΤ
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (preventives/remedies for skin aging)
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
        11
RE
(1) Adir Et Co; FR 2694295 A HCAPLUS
(2) Adir Et Co; US 5565429 A HCAPLUS
(3) Adir Et Co; EP 585155 A HCAPLUS
(4) Adir Et Co; JP 06184192 A 1994 HCAPLUS
(5) Fujisawa Pharmaceutical Co Ltd; EP 465895 A HCAPLUS
(6) Fujisawa Pharmaceutical Co Ltd; EP 494071 A HCAPLUS
(7) Fujisawa Pharmaceutical Co Ltd; US 5292510 A HCAPLUS
(8) Fujisawa Pharmaceutical Co Ltd; US 5296591 A HCAPLUS
(9) Fujisawa Pharmaceutical Co Ltd; US 5364624 A HCAPLUS
(10) Fujisawa Pharmaceutical Co Ltd; JP 04279600 A 1992 HCAPLUS
(11) Fujisawa Pharmaceutical Co Ltd; JP 04297446 A 1992 HCAPLUS
IT
     144055-55-0
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
```

(preventives/remedies for skin aging)

144055-55-0 HCAPLUS RN

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N-[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### Na

ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS L16 1998:479430 HCAPLUS ΑN DN 129:90460 TΙ Remedies for cerebral ischemic diseases IN Hisajima, Hiroshi PA Fujisawa Pharmaceutical Co., Ltd., Japan PCT Int. Appl., 31 pp. SO CODEN: PIXXD2 DT Patent LA Japanese IC ICM A61K038-55 ICS A61K045-00



CC

ST

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE 19980702 PΙ WO 9827998 Α1 WO 1997-JP4529 19971210 CA, CN, JP, KR, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 20020604 JP 1996-343192 JP 2002161051 A2 19961224 <--PRAI JP 1996-343192 19961224

OS MARPAT 129:90460

1-8 (Pharmacology)

Disclosed are remedies for cerebral ischemic diseases, which contain AΒ substances having human leukocyte elastase inhibitory activities as the active ingredient. Particular examples of such substances include WS7622A mono- and disulfates, medicinally acceptable salts thereof, trifluoromethyl ketone derivs. such as 3(RS)-[[4-(carboxymethylaminocarbonyl)phenylcarbonyl]-L-valyl-L-prolyl]amino-1,1,1trifluoro-4-methyl-2-oxopentane, and medicinally acceptable salts thereof.

cerebral ischemia elastase inhibitor WS7622A sulfate IT Brain, disease

(ischemia; human leukocyte elastase inhibitors for treatment of cerebral ischemic diseases)

140416-23-5 **144055-51-6** IT 140416-20-2 140416-21-3 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(human leukocyte elastase inhibitors for treatment of cerebral ischemic diseases)

IT 9004-06-2, Elastase RL: BSU (Biological study, unclassified); BIOL (Biological study) (human leukocyte elastase inhibitors for treatment of cerebral ischemic diseases)

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Cortex Pharmaceuticals Inc; JP 09500087 A 1994
- (2) Cortex Pharmaceuticals Inc; EP 650368 A 1994
- (3) Cortex Pharmaceuticals Inc; WO 9400095 A 1994 HCAPLUS
- (4) Fujisawa Pharmaceutical Co Ltd; JP 03218387 A 1991 HCAPLUS
- (5) Fujisawa Pharmaceutical Co Ltd; CA 2012074 A 1991 HCAPLUS
- (6) Fujisawa Pharmaceutical Co Ltd; EP 387712 A 1991 HCAPLUS
- (7) Fujisawa Pharmaceutical Co Ltd; US 5021240 A 1991 HCAPLUS
- (8) Fujisawa Pharmaceutical Co Ltd; JP 04279600 A 1992 HCAPLUS
- (9) Fujisawa Pharmaceutical Co Ltd; JP 04297446 A 1992 HCAPLUS (10) Fujisawa Pharmaceutical Co Ltd; EP 465895 A 1992 HCAPLUS
- (11) Fujisawa Pharmaceutical Co Ltd; EP 494071 A 1992 HCAPLUS
- (12) Fujisawa Pharmaceutical Co Ltd; US 5292510 A 1992 HCAPLUS
- (13) Fujisawa Pharmaceutical Co Ltd; US 5296591 A 1992 HCAPLUS
- (14) Fujisawa Pharmaceutical Co. Ltd; JP 05221872 A 1993 HCAPLUS
- (14) Fujisawa Pharmaceuticai co Ltd; JP 05221872 A 1993 HCAPLOS
- (15) Fujisawa Pharmaceutical Co Ltd; EP 519354 A 1993 HCAPLUS
- (16) Fujisawa Pharmaceutical Co Ltd; US 5279826 A 1993 HCAPLUS
- (17) Zeneca Ltd; JP 06508826 A 1994
- (18) Zeneca Ltd; EP 589937 A 1994 HCAPLUS
- (19) Zeneca Ltd; WO 9222309 A 1994 HCAPLUS
- IT 144055-51-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(human leukocyte elastase inhibitors for treatment of cerebral ischemic diseases)

RN 144055-51-6 HCAPLUS

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



AN 1997:646588 HCAPLUS

DN 127:341747

TI Biochemical and pharmacological characterization of FK706, a novel elastase inhibitor

AU Shinguh, Yasuhiko; Imai, Keisuke; Yamazaki, Akiko; Inamura, Noriaki; Shima, Ichiro; Wakabayashi, Akiko; Higashi, Yasuyuki; Ono, Takaharu

CS Exploratory Research Laboratories, Fujisawa Pharmaceutical Co., Ltd., 5-2-3 Tokodai, Tsukuba-shi, Ibaraki, 300-26, Japan

SO European Journal of Pharmacology (1997), 337(1), 63-71 CODEN: EJPHAZ; ISSN: 0014-2999

PB Elsevier

DT Journal

LA English

CC 1-12 (Pharmacology)



Section cross-reference(s): 14 FK706, sodium 2-[4-[(S)-1-[(S)-2-[(RS)-3,3,3-trifluoro-1-AΒ isopropyl-2-oxopropyl]aminocarbonyl]pyrrolidin-1-yl]carbonyl]-2methylpropyl]aminocarbonyl]benzoylamino]acetate (C26H32F3N4NaO7), is a synthetic water-sol. inhibitor of human neutrophil elastase. This compd. demonstrated a competitive and slow-binding inhibition of human neutrophil elastase with a Ki of 4.2 nM. In studies using synthetic substrates, FK706 inhibited human neutrophil elastase activity and porcine pancreatic elastase activity with resp. IC50 values of 83 and 100 nM. FK706, however, inhibited more weakly, (IC50 values>340 .mu.M) other serine proteinases such as human pancreatic .alpha.-chymotrypsin, human pancreatic trypsin and human leukocyte cathepsin G. FK706 also effectively inhibited the hydrolysis of bovine neck ligament elastin (2 mg/mL final concn.) by human neutrophil elastase (4 .mu.g/mL final concn.) with an IC50 value of 230 nM. FK706 protected animals against human neutrophil elastase (50 .mu.g/animal)-induced lung hemorrhage with ED50 values of 2.4 .mu.g/animal by intratracheal administration and 36.5 mg/kg by i.v. administration, resp. S.c. administration of FK706 significantly suppressed human neutrophil elastase (20 .mu.g/paw)-induced paw edema in mice in a dose-dependent manner (47% inhibition at a dose of 100 mg/kg). These results suggest that FK706 would be a useful tool for investigating the role of human neutrophil elastase in inflammatory disorders assocd. with an excess of elastase, such as pulmonary emphysema, adult respiratory distress syndrome, septic shock, cystic fibrosis, chronic bronchitis and rheumatoid arthritis. STFK706 elastase inhibitor biochem pharmacol ITEdema Emphysema Hemorrhage Neutrophil (biochem. and pharmacol. characterization of novel human and lab. animal neutrophil elastase inhibitor FK706 in relation to effect on hemorrhage and edema and pulmonary emphysema) ΙT Enzyme kinetics (of inhibition; biochem. and pharmacol. characterization of novel human and lab. animal neutrophil elastase inhibitor FK706 in relation to effect on hemorrhage and edema and pulmonary emphysema) ΙT 144055-55-0, FK 706 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (144055550; biochem. and pharmacol. characterization of novel human and lab. animal neutrophil elastase inhibitor FK706 in relation to effect on hemorrhage and edema and pulmonary emphysema) IT 9004-06-2, Elastase RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (biochem. and pharmacol. characterization of novel human and lab. animal neutrophil elastase inhibitor FK706 in relation to effect on hemorrhage and edema and pulmonary emphysema) TT 144055-55-0, FK 706 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (144055550; biochem. and pharmacol. characterization of novel human and lab. animal neutrophil elastase inhibitor FK706 in relation to effect on hemorrhage and edema and pulmonary emphysema) RN144055-55-0 HCAPLUS CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N-[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI)

Absolute stereochemistry.

(CA INDEX NAME)

#### Na

Section cross-reference(s): 1

ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS L16 1997:559835 HCAPLUS ΑN "Pharmacological evaluation of FK706, a novel and potent ΤI elastase inhibitor" ΑU Yamazaki, Akiko; Shinguh, Yasuhiko; Inamura, Noriaki; Nakahara, Kunio; Shimomura, Kyouichi; Ono, Takaharu SO Japanese Journal of Pharmacology (1997), 74(4), 341 CODEN: JJPAAZ; ISSN: 0021-5198 PB Japanese Pharmacological Society DTJournal; Errata LAEnglish AB Unavailable L16 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS AN 1992:612979 HCAPLUS DN 117:212979 Preparation of trifluoromethylketone tripeptide derivatives as human ΤI leukocyte elastase inhibitors IN Hemmi, Keiji; Shima, Ichiro; Imai, Keisuke; Tanaka, Hirokazu Fujisawa Pharmaceutical Co., Ltd., Japan PA Eur. Pat. Appl., 26 pp. SO CODEN: EPXXDW DTPatent LΑ English IC ICM C07K005-08 ICS A61K037-64 CC 34-3 (Amino Acids, Peptides, and Proteins)

PI

.CNT	1								
PA'	TENT NO.	KIND	DATE		API	PLICATION	ON NO.	DATE	
	494071 494071	A2 A3	19920708 19930505		EP	1992-10	00014	19920102	<
EP	R: AT, BE,	B1 CH, DE	19970416 , DK, ES,	FR,	GB, C	GR, IT,	LI, LU,	NL, PT,	SE
	-5296591 9105996	A	19940322 19920701			1991-80 1991-59		19911212 19911219	
	9103996 -9 <del>18</del> 9853	A Al	19920701		_	1991-89		19911219	
	641577 04297446	B2 A2	19930923 19921021		TD	1991-36	C1121	19911219	/
	06099378	B4	19941207			1991-3	31134	19911219	\ <del>-</del> -
	2073684	. C1	19970220			1991-50		19911228	
CA CN	2058560 1063108	AA A	19920701 19920729		*	1991-20 1991-11		19911230 19911230	
	1040003	В	19980930						
	60507 210263	A2 B	19920928 19950328		HÜ	1991-43	153	19911230	<

```
ZA 9110200
                              19921028
                                              ZA 1991-10200
                        Α
                                                                19911230 <--
     NO 9200035
                        Α
                              19920701
                                              NO 1992-35
                                                                19920102 <--
                        Ε
                                              AT 1992-100014
                                                                19920102 <---
     AT 151775
                              19970515
                        Т3
     ES 2099755
                              19970601
                                              ES 1992-100014
                                                                19920102 <--
PRAI GB 1990-28231
                              19901231
                                         <--
     GB 1991-19713
                              19910916
                                         <--
OS ·
     MARPAT 117:212979
GI
```

R1NHCO 
$$\longrightarrow$$
 XCONHCHR2COYCONHCHR3COCF3 I

Q1=  $\longrightarrow$  NCH2  $\longrightarrow$  NaO2CCH2NHCO  $\longrightarrow$  CF3  $\longrightarrow$  O II

AB Title compds. [I; R1 = alkyl[substituted by 1-2 of (esterified) carboxy, dialkylcarbanoyl, (substituted) phenylalkyl], halophenyl, morpholino, morpholinoalkyl; R2, R3 = alkyl; X = null, NH; Y = Q1, Q2], were prepd. Thus, II, prepd. via hydrogenolysis of the benzyl ester followed by salification, at 200 .mu.g/site intratracheally gave 97% inhibition of porcine pancreas elastase-induced emphysema in hamsters.

ST peptide trifluoromethyl ketone elastase inhibitor; drug peptidyltrifluoromethyl ketone

IT Transplant and Transplantation

(rejection of, treatment of, trifluoromethylketone tripeptide derivs. for)

IT Cystic fibrosis

Emphysema

Ischemia

Lupus erythematosus

Psoriasis

Sepsis and Septicemia

Shock

(treatment of, trifluoromethylketone tripeptide derivs. for)

IT Respiratory distress syndrome

(adult, treatment of, trifluoromethylketone tripeptide derivs. for)

IT Inflammation inhibitors

(antiarthritics, trifluoromethylketone tripeptide derivs.)

IT Bronchodilators

(antiasthmatics, trifluoromethylketone tripeptide derivs.)

IT Antiarteriosclerotics

(antiatherosclerotics, trifluoromethylketone tripeptide derivs.)

IT Lung, disease

(chronic obstructive, treatment of, trifluoromethylketone tripeptide derivs. for)

IT Respiratory tract

(disease, injury, treatment of, trifluoromethylketone tripeptide
derivs. for)

```
IT
     Periodontium
        (disease, periodontosis, treatment of, trifluoromethylketone tripeptide
        derivs. for)
IT
     Amnion
        (disease, premature rupture, treatment of, trifluoromethylketone
        tripeptide derivs. for)
IT
        (diseases, bronchiectasis, treatment of, trifluoromethylketone
        tripeptide derivs. for)
ΙT
     Bronchi
        (diseases, chronic bronchitis, treatment of, trifluoromethylketone
        tripeptide derivs. for)
IT
        (diseases, diffuse panbronchiolitis, treatment of,
        trifluoromethylketone tripeptide derivs. for)
IT
     Blood coagulation
        (disorder, disseminated intravascular, treatment of,
        trifluoromethylketone tripeptide derivs. for)
     Lung, disease
IT
        (fibrosis, treatment of, trifluoromethylketone tripeptide derivs. for)
IT
     Eye, disease
        (keratoconjunctivitis, treatment of, trifluoromethylketone tripeptide
        derivs. for)
IT
     Kidney, disease
        (nephritis, treatment of, trifluoromethylketone tripeptide derivs. for)
IT
     Pancreas, disease
        (pancreatitis, treatment of, trifluoromethylketone tripeptide derivs.
        for)
IT
     Perfusion
        (re-, treatment of, trifluoromethylketone tripeptide derivs. for)
IT
     Peptides, preparation
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (tri-, trifluoromethylketone derivs., prepn. of, as human leukocyte
        elastase inhibitors)
ΙT
     109968-23-2, Elastase (human leukocyte protein moiety reduced)
     RL: USES (Uses)
        (inhibitors, trifluoromethylketone tripeptide derivs.)
     13734-41-3
                  16652-71-4, Proline benzyl ester hydrochloride
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (peptide coupling reaction of, in prepn. of human leukocyte elastase
        inhibitor)
     144055-42-5P
                    144055-43-6P
                                   144055-44-7P
                                                   144055-45-8P
                                                                  144055-46-9P
ΤT
     144055-47-0P
                    144055-48-1P
                                   144055-50-5P 144055-51-6P
     144055-52-7P
                    144055-53-8P
                                   144055-54-9P 144055-55-0P
     144055-56-1P
                    144055-57-2P
                                   144055-58-3P
                                                   144055-59-4P
                                                                  144055-60-7P
     144055-61-8P
                    144055-62-9P
                                   144055-63-0P
                                                   144079-17-4P
                                                                  144079-18-5P
     144079-19-6P
                    144125-37-1P
                                   144125-38-2P
                                                   144125-39-3P
     144125-40-6P 144125-41-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as human leukocyte elastase inhibitor)
     58872-03-0P
                   95501-60-3P
                                 105080-02-2P
TΤ
                                                 105095-20-3P
                                                                105095-21-4P
     105181-51-9P
                    128483-86-3P
                                   144055-64-1P
                                                   144055-65-2P
                                                                  144055-66-3P
     144055-67-4P
                    144055-68-5P
                                   144055-69-6P
                                                   144055-70-9P
                                                                  144055-71-0P
     144055-72-1P
                    144055-73-2P
                                   144055-74-3P
                                                   144055-75-4P
                                                                  144055-76-5P
                                   144079-22-1P
                                                   144125-42-8P
     144079-20-9P
                    144079-21-0P
                                                                  144125-43-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as intermediate for human leukocyte elastase inhibitor)
                                       144055-77-6
                                                      144055-78-7
IT
     21760-98-5, Valine benzyl ester
     RL: RCT (Reactant); RACT (Reactant or reagent).
        (reaction of, in prepn. of human leukocyte elastase inhibitor)
     619-45-4, Methyl p-aminobenzoate 1679-64-7, Terephthalic acid monomethyl
IT
             1738-76-7, Glycine benzyl ester p-toluenesulfonate
                                                                   2038-03-1,
```

4-(2-Aminoethyl)morpholine

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in prepn. of peptide analog human leukocyte elastase inhibitor)

IT 144055-51-6P 144055-55-0P 144125-40-6P

144125-41-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as human leukocyte elastase inhibitor)

RN 144055-51-6 HCAPLUS

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N-[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $H$ 
 $O$ 
 $i-Pr$ 
 $H$ 
 $N$ 
 $S$ 
 $O$ 
 $i-Pr$ 
 $N$ 
 $H$ 
 $O$ 
 $CF_3$ 

RN 144055-55-0 HCAPLUS

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, monosodium salt (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

Na

RN 144125-40-6 HCAPLUS

CN L-Prolinamide, N-[4-[((carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 144125-41-7 HCAPLUS

CN L-Prolinamide, N-[4-[[(carboxymethyl)amino]carbonyl]benzoyl]-L-valyl-N[3,3,3-trifluoro-1-(1-methylethyl)-2-oxopropyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> fil embase

FILE 'EMBASE' ENTERED AT 06:39:45 ON 29 MAY 2003 COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE COVERS 1974 TO 22 May 2003 (20030522/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all tot

L19 ANSWER 1 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

AN 1999406523 EMBASE

TI Smoking accelerates absorption of inhaled neutrophil elastase inhibitor FK706.

AU Koizumi F.; Murakami M.; Kageyama H.; Katashima M.; Terakawa M.; Ohnishi A.

CS Dr. A. Ohnishi, Departments of Internal Medicine, Daisan Hospital, Jikei University School of Medicine, 4-11-1 Izumihancho, Komae, Tokyo 201-8601, Japan

(1999) 66/5 (501-508).

Clinical Pharmacology and Therapeutics,

Refs: 28

ISSN: 0009-9236 CODEN: CLPTAT

United States

Journal; Article

FS 030 Pharmacology

037 Drug Literature Index

LA English

DΨ

SL English

Purpose: We compared the pharmacokinetics of the inhaled novel neutrophil elastase inhibitor FK706 between healthy nonsmokers and smokers.

Methods: Six healthy nonsmokers and six smokers inhaled 50 to 400 mg
FK706 in two different doses. Series of plasma concentrations of the SSS form of FK706 (pharmacologically active epimer) were analyzed model dependently and independently. Pharmacokinetic parameters obtained from each group were compared after standardization by doses. Results: The plasma concentration— time curve of inhaled FK706 was apparently different between smokers and nonsmokers. The maximum plasma concentrations (C(max)) were significantly higher in the smokers than in the nonsmokers (smokers, 1.47 .+-. 0.62 ng/mL/mg; nonsmokers, 0.49

```
.+-. 0.14 \text{ ng/mL/mg} [mean .+-. SD; P < .01]). The time to reach C(max)
(t(max)) and elimination half-life (t(1/2)) were statistically smaller in
the smokers compared with the t(max) and elimination t(1/2) in the
nonsmokers (t(max) in smokers, 0.44 .+-. 0.27 hours; t(max) in nonsmokers,
1.17 .+-. 0.39 hours [P < .01]; t(1/2) in smokers, 1.23 .+-. 0.40 hours;
t(1/2) in nonsmokers, 2.73 .+-. 0.57 hours [P < .01]). The area under the
plasma concentration-time curve and plasma clearance were not
significantly different between the two groups. Model-dependent
pharmacokinetic analysis, assuming a flip-flop model, revealed that the
absorption rate constant (k(a)) was about 10 times greater in smokers than
the k(a) in nonsmokers. Conclusion: Significant increases of C(max) and
k(a) and reductions of t(max) and elimination t(1/2) of the inhaled
FK706 were observed in the healthy smokers, suggesting that the
smoking habit accelerates the drug absorption after inhalation. These
results suggest that we should pay attention to the drug-related adverse
events caused by smoking, especially when the drug has a narrow
therapeutic range.
Medical Descriptors:
*smoking
*drug absorption
drug blood level
drug half life
drug elimination
area under the curve
dose response
nebulizer
human
male
human experiment
normal human
adult
inhalational drug administration
article
priority journal
Drug Descriptors:
*leukocyte elastase inhibitor: DO, drug dose
*leukocyte elastase inhibitor: PK, pharmacokinetics
*2 [4 [[1 [[2 [(3,3,3 trifluoro 1 isopropyl 1
oxopropyl)aminocarbonyl]pyrrolidin 1 yl]carbonyl] 2
methylpropyl]aminocarbomyl]benzoylamino]acetate: DO, drug dose
*2 [4 [[1 [[2 [(3,3,3 trifluoro 1 isopropyl 1
oxopropyl)aminocarbonyl]pyrrolidin 1 yl]carbonyl] 2
methylpropyl]aminocarbomyl]benzoylamino]acetate: PK, pharmacokinetics
  fk 706
Fk 706
(1) NE U07
(1) Omron (Japan)
ANSWER 2 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
1999382736 EMBASE
Update on clinical trials in the treatment of pulmonary disease in
patients with cystic fibrosis.
Shah P.L.
P.L. Shah, Royal Brompton Hospital, Sydpey Street, London SW3 6NP, United
Kingdom. pallav.shah@ic.ac.uk
Expert Opinion on Investigational Drugs,
                                         (1999) $/11 (1917-1927).
Refs: 62
ISSN: 1354-3784 CODEN: EOIDER
United Kingdom
Journal; General Review
        Chest Diseases, Thoracic Surgery and Tuberculosis
015
030
        Pharmacology
037
        Drug Literature Index
```

CT

CN

NP

CO

L19

ΑN

DT

FS

```
LA
     English
SL
     English
AB
     Cystic fibrosis is a congenital disease resulting from an abnormality of
     the cystic fibrosis transmembrane conductance regulator (CFTR) gene. A
     defect in ion transport leads to poor clearance of viscoelastic secretions
     and a susceptibility to bacterial infection. This initiates a
     self-perpetuating cycle of infection and inflammation that accounts for
     the chronic endobronchial sepsis and pulmonary damage observed in patients
     with cystic fibrosis. Recent studies have attempted to correct the gene
     defect, enhance the expression and function of the CFTR protein and
     correct the ion transport defect. Improving the rheological properties of
     airway secretions, enhancing host defence and controlling inflammation are
     the other key strategies.
CT
     Medical Descriptors:
     *lung disease: CO, complication
     *lung disease: DT, drug therapy
     *cystic fibrosis: CN, congenital disorder
     *cystic fibrosis: TH, therapy
     ion transport
     infection sensitivity
     protein expression
     secretions
     host resistance
     gene therapy
     human
     review
     Drug Descriptors:
     transmembrane conductance regulator: EC, endogenous compound
     antiinflammatory agent: DT, drug therapy
     proteinase inhibitor: DT, drug therapy
     arylbutyric acid derivative: DT, drug therapy
     arylbutyric acid derivative: PD, pharmacology
     8 cyclopentyl 1,3 dipropylxanthine: DT, drug therapy
     8 cyclopentyl 1,3 dipropylxanthine: PD, pharmacology
     amiloride: DT, drug therapy
     sodium channel blocking agent: DT, drug therapy
     dornase alfa: DT, drug therapy
     gelsolin: DT, drug therapy
     nacystelyn: DT, drug therapy
     tyloxapol: DT, drug therapy
     lung surfactant: DT, drug therapy
     mannitol: DT, drug therapy
     dextran: DT, drug therapy
     tobramycin: DO, drug dose
     tobramycin: DT, drug therapy
     pseudostat: DT, drug therapy
     pseudomonas antibody: DT, drug therapy
     rbpi 21: DT, drug therapy
     pentoxifylline: DT, drug therapy
     alpha 1 antitrypsin: DT, drug therapy
     secretory leukocyte proteinase inhibitor: DT, drug therapy
     ce 1037: DT, drug therapy
     n [1 (1,3 benzodioxol 5 yl)butyl] 3,3 diethyl 2 [4 [(4 methyl 1
     piperazinyl)carbonyl]phenoxy] 4 oxo 1 azetidinecarboxamide: DT, drug
     therapy
       fk 706: DT, drug therapy
     (proteinase inhibitor) 37205-61-1; (8 cyclopentyl 1,3 dipropylxanthine)
RN
     102146-07-6; (amiloride) 2016-88-8, 2609-46-3; (dornase alfa) 143831-71-4;
     (tyloxapol) 25301-02-4; (lung surfactant) 99732-49-7; (mannitol) 69-65-8,
     87-78-5; (dextran) 87915-38-6, 9014-78-2; (tobramycin) 32986-56-4;
     (pentoxifylline) 6493-05-6; (alpha 1 antitrypsin) 9041-92-3; (n [1 (1,3
     benzodioxol 5 yl)butyl] 3,3 diethyl 2 [4 [(4 methyl 1
```

piperazinyl)carbonyl]phenoxy] 4 oxo 1 azetidinecarboxamide) 157341-41-8

```
CN
     (1) Exosurf; (2) Ce 1037; (3) Dmp 777; (4) Fk 706
CO
     (1) Glaxo; (2) Cortech; (3) Du Pont; (4) Fujisawa; SMB; Discovery;
     Hoffmann La Roche; Tobishi Pharmaceutical; Tobi; Genentech; Biogen;
     Univax; Genzyme; Hoechst Marion Roussel; Ppl therapeutics; Synergen;
     Amgen; Cortecs; Xoma; Sciclone
     ANSWER 3 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
L19
ΑN
     1999161588 EMBASE
TI
     The protease-antiprotease battle in the cystic fibrosis lung.
ΑU
     Balfour-Lynn I.M.
CS
     I.M. Balfour-Lynn, Dept. Paediat. Respiratory Medicine, Royal Brompton
     Harefield NHS Trust, Sydney Street, London SW3 6NP, United Kingdom
SO
     Journal of the Royal Society of Medicine, Supplement (, (1999)) 92/37
     (23-30).
     Refs: 65
     ISSN: 0267-5331 CODEN: JRMSEW
     United Kingdom
     Journal; Conference Article
     004
             Microbiology
     006
             Internal Medicine
     007
             Pediatrics and Pediatric Surgery
     015
             Chest Diseases, Thoracic Surgery and Tuberculosis
     026
             Immunology, Serology and Transplantation
     037
             Drug Literature Index
     038
             Adverse Reactions TitlesAdverse Reactions Titles
LA
     English
     Medical Descriptors:
     *cystic fibrosis: CN, congenital disorder
     *cystic fibrosis: DT, drug therapy
     *cystic fibrosis: ET, etiology
     pneumonia: DT, drug therapy
     pneumonia: ET, etiology
     respiratory tract infection: ET, etiology
     pseudomonas aeruginosa
     recurrent infection: ET, etiology
     neutrophil
     respiratory epithelium
     thorax disease: SI, side effect
     arthralgia: SI, side effect
     respiratory tract disease: SI, side effect
     nebulizer
     drug tolerability
     transgene
     gene therapy
     human
     oral drug administration
     inhalational drug administration
     conference paper
     Drug Descriptors:
     *proteinase: EC, endogenous compound
     *proteinase inhibitor: AE, adverse drug reaction
     *proteinase inhibitor: AD, drug administration
     *proteinase inhibitor: CR, drug concentration
     *proteinase inhibitor: DO, drug dose
     *proteinase inhibitor: DT, drug therapy
     *proteinase inhibitor: EC, endogenous compound
     *proteinase inhibitor: PK, pharmacokinetics
     *proteinase inhibitor: PD, pharmacology
     transmembrane conductance regulator: EC, endogenous compound
     cytokine: EC, endogenous compound
     bacterial enzyme
     leukocyte elastase
```

alpha 1 antitrypsin: AE, adverse drug reaction

```
alpha 1 antitrypsin: AD, drug administration
alpha 1 antitrypsin: CR, drug concentration
alpha 1 antitrypsin: DO, drug dose
alpha 1 antitrypsin: DT, drug therapy
alpha 1 antitrypsin: EC, endogenous compound
alpha 1 antitrypsin: PK, pharmacokinetics
alpha 1 antitrypsin: PD, pharmacology
secretory leukocyte proteinase inhibitor: DO, drug dose
secretory leukocyte proteinase inhibitor: DT, drug therapy
secretory leukocyte proteinase inhibitor: EC, endogenous compound
secretory leukocyte proteinase inhibitor: PK, pharmacokinetics
secretory leukocyte proteinase inhibitor: PD, pharmacology
n [1 (1,3 benzodioxol 5 yl)butyl] 3,3 diethyl 2 [4 [(4 methyl 1
piperazinyl)carbonyl]phenoxy] 4 oxo 1 azetidinecarboxamide: AD, drug
administration
n [1 (1,3 benzodioxol 5 yl)butyl] 3,3 diethyl 2 [4 [(4 methyl 1
piperazinyl)carbonyl]phenoxy] 4 oxo 1 azetidinecarboxamide: DV, drug
development
n [1 (1,3 benzodioxol 5 yl)butyl] 3,3 diethyl 2 [4 [(4 methyl 1
piperazinyl)carbonyl]phenoxy] 4 oxo 1 azetidinecarboxamide: PD,
pharmacology
3 acetoxymethyl 2 (2 carboxy 1 pyrrolidinylcarbonyl) 7alpha methoxy 8 oxo
5 thia 1 azabicyclo[4.2.0]oct 2 ene 5,5 dioxide: AD, drug administration
3 acetoxymethyl 2 (2 carboxy 1 pyrrolidinylcarbonyl) 7alpha methoxy 8 oxo
5 thia 1 azabicyclo[4.2.0]oct 2 ene 5,5 dioxide: DV, drug development
3 acetoxymethyl 2 (2 carboxy 1 pyrrolidinylcarbonyl) 7alpha methoxy 8 oxo
5 thia 1 azabicyclo[4.2.0]oct 2 ene 5,5 dioxide: PD, pharmacology
[4 (4 bromophenylsulfonylcarbamoyl)benzoyl]valylproline n (2 methyl 1
trifluoroacetylpropyl)amide: AD, drug administration
[4 (4 bromophenylsulfonylcarbamoyl)benzoyl]valylproline n (2 methyl 1
trifluoroacetylpropyl)amide: DV, drug development
[4 (4 bromophenylsulfonylcarbamoyl)benzoyl]valylproline n (2 methyl 1
trifluoroacetylpropyl)amide: PD, pharmacology
  fk 706: AD, drug administration
  fk 706: DV, drug development
  fk 706: PD, pharmacology
(proteinase) 9001-92-7; (proteinase inhibitor) 37205-61-1; (leukocyte
elastase) 109968-22-1; (alpha 1 antitrypsin) 9041-92-3; (n [1 (1,3 benzodioxol 5 yl)butyl] 3,3 diethyl 2 [4 [(4 methyl 1
piperazinyl)carbonyl]phenoxy] 4 oxo 1 azetidinecarboxamide) 157341-41-8;
(3 acetoxymethyl 2 (2 carboxy 1 pyrrolidinylcarbonyl) 7alpha methoxy 8 oxo
5 thia 1 azabicyclo[4.2.0]oct 2 ene 5,5 dioxide) 116507-04-1; ([4 (4
bromophenylsulfonylcarbamoyl)benzoyl]valylproline n (2 methyl 1
trifluoroacetylpropyl)amide) 105080-32-8
(1) Prolastin
(1) Bayer (United States)
ANSWER 4 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
97337695 EMBASE
1997337695
Biochemical and pharmacological characterization of FK706, a
novel elastase inhibitor.
Shinguh Y.; Imai K.; Yamazaki A.; Inamura N.; Shima I.; Wakabayashi A.;
Higashi Y.; Ono T.
Y. Shinguh, Exploratory Research-Laboratories, Fujisawa Pharmaceutical Co.
Ltd, 5-2-3 Tokodai, Tsukuba-shi, Ibaraki 300-26, Japan European Journal of Pharmacology, (1997) 337/1 (63-71).
Refs: 38
ISSN: 0014-2999 CODEN: EJPHAZ
S 0014-2999(97)01284-3
Netherlands
Journal; Article
        Clinical Biochemistry
```

RN

CN

CO

L19

AN DN

TΙ

PUI

CY

DT

FS

```
030
             Pharmacology
             Drug Literature Index
     037
LA
     English
SL
     English
AΒ
     FK706, sodium 2-[4-[(S)-1-[(S)-2-[(RS)-3, 3, 3])]
     -trifluoro-1-isopropyl-2-oxopropyl]aminocarbonyl]pyrrolidin-1-yl]carbonyl]-
     2 -methylpropyl] aminocarbonyl] benzoylamino] acetate, C26H32F3N4NaO7, is
     a synthetic water-soluble inhibitor of human neutrophil elastase. This
     compound demonstrated a competitive and slow-binding inhibition of human
     neutrophil elastase with a K(i) of 4.2 nM. In studies using synthetic
     substrates, FK706 inhibited human neutrophil elastase activity
     and porcine pancreatic elastase activity with respective values of 83 and
     100 nM. FK706, however, inhibited more weakly, (IC50 values >.
     340 .mu.M) other serine proteinases such as human pancreatic
     .alpha.-chymotrypsin, human pancreatic trypsin and human leukocyte
     cathepsin G. FK706 also effectively inhibited the hydrolysis of
     bovine neck ligament elastin (2 mg/ml final concentration) by human
     neutrophil elastase (4 .mu.g/ml final concentration) with an IC50 value of
     230 nM. FK706 protected animals against human neutrophil
     elastase (50 .mu.g/animal)-induced lung hemorrhage with ED50 values of 2.4
     .mu.g/animal by intratracheal administration and 36.5 mg/kg by intravenous
     administration, respectively. Subcutaneous administration of FK706
     significantly suppressed human neutrophil elastase (20 .mu.g/paw)-induced
     paw edema in mice in a dose-dependent manner (47% inhibition at a dose of
     100 mg/kg). These results suggest that FK706 would be a useful
     tool for investigating the role of human neutrophil elastase in
     inflammatory disorders associated with an excess of elastase, such as
     pulmonary emphysema, adult respiratory distress syndrome, septic shack,
     cystic fibrosis, chronic bronchitis and rheumatoid arthritis.
CT
     Medical Descriptors:
     *connective tissue disease: ET, etiology
     *enzyme inhibition
     adult respiratory distress syndrome: ET, etiology
     animal experiment
     animal model
     animal tissue
     article
     chronic bronchitis: ET, etiology
     controlled study
     cystic fibrosis: ET, etiology
     hamster
     human
    human cell
     lung emphysema: ET, etiology
     mouse
     nonhuman
     priority journal
     rheumatoid arthritis: ET, etiology
     Drug Descriptors:
     *elastase inhibitor: PD, pharmacology
       *fk 706: PD, pharmacology
     leukocyte elastase: EC, endogenous compound
     unclassified drug
     (leukocyte elastase) 109968-22-1
RN
CN
     Fk 706
     ANSWER 5 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
     97288827 EMBASE
     Erratum: O-292 'Pharmacological evaluation of FK706, a novel and
     potent elastase inhibitor' (The Japanese Journal of Pharamacology
```

Yamazaki A.; Shinguh Y.; Inamura N.; Nakahara K.; Shimomura K.; Ono

AU

-1-Q meller 088525 (1997)

74/4 (341).

Japanese Journal of Pharmacology, SO

Refs: 0

ISSN: 0021-5198 CODEN: JJPAAZ

CY Japan

DΤ Journal; Errata

FS 030 Pharmacology

LA English

CTMedical Descriptors:

> \*error erratum

=> fil biosis

FILE 'BIOSIS' ENTERED AT 06:40:35 ON 29 MAY 2003 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

FILE COVERS 1969 TO DATE. CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 28 May 2003 (20030528/ED)

#### => d all

ANSWER 1 OF 1 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. L22

1997:235804 BIOSIS AN

DN PREV199799535007

TΙ Pharmacological evaluation of FK706, a novel and potent elastase

Yamazaki, Akiko; Shinguh, Yasuhiko; Inamura, Noriaki; Nakahara, Kunio; ΑU Shimomura, Kyouichi; Ono, Takaharu

Exploratory Res. Lab., Fujisawa Pharmaceutical Co. Ltd., 5-2-3 Tokodai, CS Tsukuba 300-26 Japan

Japanese Journal of Pharmacology, (1997) Vol. 73, No. SUPPL. 1, pp. 114P. SO Meeting Info.: 70th Annual Meeting of the Japanese Pharmacological Society Chiba, Japan March 22-25, 1997 ISSN: 0021-5198.

DT Conference; Abstract

LA English

CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals 00520 Cytology and Cytochemistry - Human \*02508 Enzymes - General and Comparative Studies; Coenzymes \*10802 Respiratory System - General; Methods \*22002 Pharmacology - General

Immunology and Immunochemistry - General; Methods

85740 BC. Suidae Hominidae 86215 Cricetidae 86310 Muridae \*86375

ΙT Major Concepts

Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Immune System (Chemical Coordination and Homeostasis); Pharmacology; Respiratory System (Respiration)

Chemicals & Biochemicals IT

ELASTASE

IT Miscellaneous Descriptors

BLOOD AND LYMPHATICS; DIGESTIVE SYSTEM; ELASTASE; ELASTASE INHIBITOR; ENDOCRINE SYSTEM; ENZYME INHIBITOR-DRUG; FK706; IMMUNE SYSTEM; LUNG HEMORRHAGE; NEUTROPHIL; PANCREAS; PHARMACOLOGICAL EVALUATION; PHARMACOLOGY; PULMONARY EMPHYSEMA; RESPIRATORY DISTRESS SYNDROME; RESPIRATORY SYSTEM DISEASE; VASCULAR DISEASE



```
ORGN Super Taxa
        Cricetidae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia;
        Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia; Muridae:
        Rodentia, Mammalia, Vertebrata, Chordata, Animalia; Suidae:
        Artiodactyla, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
        hamster (Cricetidae); human (Hominidae); mouse (Muridae); pig (Suidae)
ORGN Organism Superterms
        animals; artiodactyls; chordates; humans; mammals; nonhuman mammals;
        nonhuman vertebrates; primates; rodents; vertebrates
RN
     9004-06-2 (ELASTASE)
=> d his
     (FILE 'HOME' ENTERED AT 06:26:50 ON 29 MAY 2003)
                SET COST OFF
     FILE 'HCAPLUS' ENTERED AT 06:27:20 ON 29 MAY 2003
                E WO2000-JP6873/AP, PRN
L1
              1 S E3, E4
     FILE 'REGISTRY' ENTERED AT 06:27:33 ON 29 MAY 2003
L2
              1 S 144055-55-0
L3
              1 S 144055-51-6
                E C26H33F3N4O7/MF
              5 S E3 AND NC4/ES AND 46.150.18/RID
L4
L5
              3 S L4 NOT ALANYL
                SEL RN
L6
              1 S E1-E3/CRN
L7
              4 S L2, L3, L5, L6
     FILE 'HCAOLD' ENTERED AT 06:30:06 ON 29 MAY 2003
L8
              0 S L7
     FILE 'HCAPLUS' ENTERED AT 06:30:06 ON 29 MAY 2003
L9
              8 S L7
L10
              8 S FK706 OR FK 706
             12 S L9, L10
L11
              1 S L11 AND (TAKAKURA ? OR MINOURA ?)/AU
L12
L13
              1 S L1 AND FUJISAWA?/PA,CS
              7 S L11 AND (PD<=20001002 OR PRD<=20001002 OR AD<=20001002)
L14
              6 S L11 AND (PD<=19991002 OR PRD<=19991002 OR AD<=19991002)
L15
              7 S L1, L12-L15
L16
     FILE 'USPATFULL, USPAT2' ENTERED AT 06:38:13 ON 29 MAY 2003
L17
              3 S L11
     FILE 'REGISTRY' ENTERED AT 06:38:34 ON 29 MAY 2003
     FILE 'USPATFULL, USPAT2' ENTERED AT 06:38:45 ON 29 MAY 2003
     FILE 'HCAPLUS' ENTERED AT 06:39:00 ON 29 MAY 2003
     FILE 'EMBASE' ENTERED AT 06:39:18 ON 29 MAY 2003
L18
              9 S L11
L19
              5 S L18 AND PY<=2000
     FILE 'EMBASE' ENTERED AT 06:39:45 ON 29 MAY 2003
     FILE 'BIOSIS' ENTERED AT 06:39:55 ON 29 MAY 2003
              4 S L11
L20
              3 S L20 AND PY<=2000
L21
```

L22

1 S L21 AND CONFERENCE/DT

FILE 'BIOSIS' ENTERED AT 06:40:35 ON 29 MAY 2003